

**Department of State**  
**Fleet AFV Program Report for Fiscal Year 2013**  
**January 10, 2014**

This report summarizes the U.S. Department of State (DOS) fiscal year (FY) 2013 performance in meeting the requirements of: Executive Order (EO) 13423, Strengthening Federal Environmental, Energy, and Transportation Management; the Energy Policy Act of 1992 (EPAAct; 42 US Code 13211-13219) as amended by the Energy Conservation Reauthorization Act of 1998 (ECRA; Public Law 105-388) and the EPAAct of 2005 (Public Law 109-58); the Energy Independence and Security Act (EISA; Public Law 110-140) of 2007 (Section 141), and the Federal Management Regulation - Vehicle Management (41 CFR part 102-34).

Exhibit 1 summarizes DOS progress in meeting the EO and EPAAct requirements. Appendices A, B and C reflect DOS vehicle acquisitions, fuel consumption, and Executive Fleet data, respectively. Appendix D contains a glossary of acronyms and terms used in this report.

**Exhibit 1. DOS Performance – EPAAct/EO Requirements FY 2013**

Authority /Mandate	Performance Measure	Requirement	DOS Performance in FY 2013
EPAAct 1992	Alternative Fuel Vehicle (AFV) acquisitions	75 percent of the 43 covered <sup>1</sup> fleet vehicle acquisitions must be AFVs.	Accumulated 42 AFV credits (98 percent of covered acquisitions). <b>COMPLIANT</b>
EO 13423	Reduce annual covered petroleum consumption	Reduce petroleum consumption of covered <sup>2</sup> vehicles by two percent annually by end of FY 2015 from FY 2005 baseline of 279,127 gasoline gallon equivalents (GGEs).	Consumed 227,349 GGEs, a decrease of 18.5 percent from baseline (exceeding the target of a 16 percent decrease [i.e., 234,466 GGEs] by end of FY 2013). <b>COMPLIANT</b>
EO 13423	Increase annual alternative fuel (AF) consumption	Equal or exceed the FY 2013 AF usage target of 61,049 GGEs, based on a compounded 10 percent annual rate of increase over the FY 2005 baseline of 28,480 GGEs.	Used 19,476 GGEs, which is only 32 percent of the FY 2013 target. <b>NON-COMPLIANT</b>
EPAAct 2005, Sect. 701	Operate all dual-fuel non-waived AFVs on AF	AF use must comprise 95 percent or more of fuel used in non-waived, non-law enforcement (non-LE) dual-fuel AFVs.	Actual usage is estimated to be about 19 percent. <b>NON-COMPLIANT</b>

Authority /Mandate	Performance Measure	Requirement	DOS Performance in FY 2013
41 C.F.R. 102-34.50; Presidential Memo 5/24/2011	Executive fleet vehicles (EFVs) limited in size to achieve fuel efficiency	EFVs should be midsize or smaller sedans or intermediate or smaller sport utility vehicles (SUVs), except where larger ones are essential. Any larger EFVs must be reported on agency website.	17 of 19 EFVs are midsize or smaller sedans or intermediate or smaller SUVs. Appendix C reports on those EFVs. <b><i>NON-COMPLIANT</i></b>

<sup>1</sup>By definition, the term “covered” relative to vehicle acquisitions includes all domestic non-law enforcement (non-LE), light-duty (LD) vehicles operated in a metropolitan statistical area (MSA) and acquired by lease or purchase in FY 2013.

<sup>2</sup> By definition, the term “covered” relative to petroleum fuel reduction includes all domestic, non-LE vehicles of any weight and operating in or out of an MSA.

### **EPAct AFV Acquisition Compliance**

DOS exceeded EPAct AFV acquisition requirements in FY 2013 as follows:

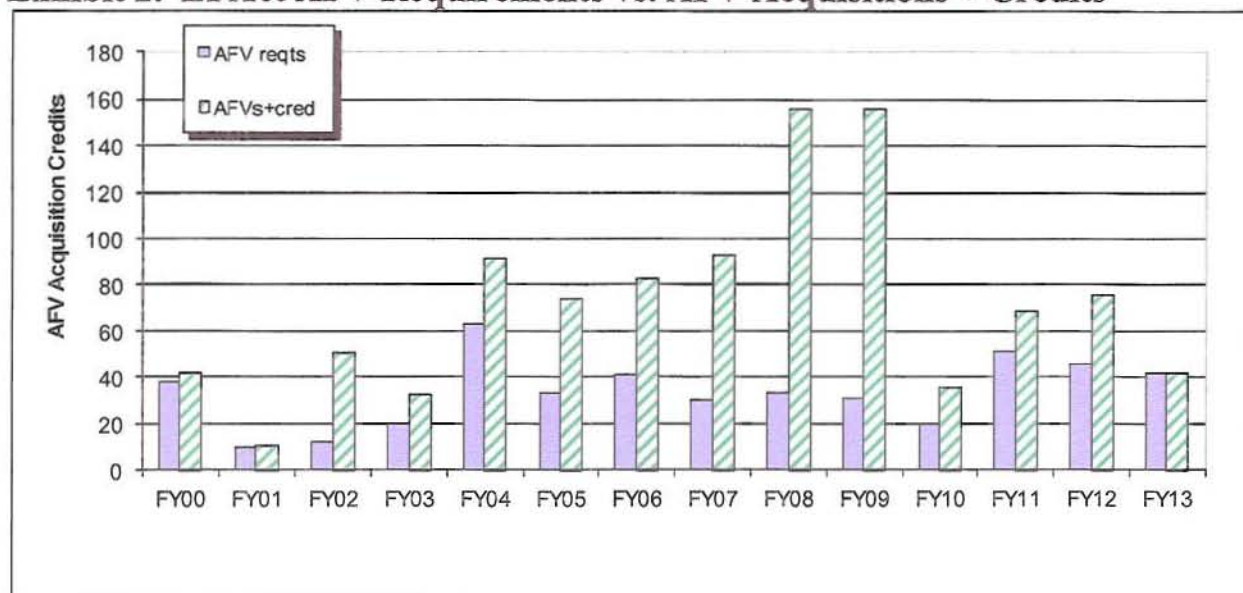
- DOS acquired 43 EPAct-covered (domestic, non-LE, light-duty [LD]) vehicles, as shown in Appendix A.
- DOS accumulated 42 AFV credits through acquisition of 42 non-LE AFVs, of which 36 were LD and six were medium duty (MD).
- The resulting overall EPAct compliance percentage was 98 percent (42 AFV credits ÷ 43 EPAct-covered vehicles).

### ***AFV Acquisitions***

DOS has successfully met the EPAct requirement every year (see Exhibit 2), as reflected in the Federal Automotive Statistical Tool (FAST), due to DOS’s general policy of acquiring AFVs for all covered vehicle requirements as long as AFVs meeting operational requirements are available from the original equipment manufacturers (OEMs). DOS’s AFV credits were substantially smaller than in the years prior to FY 2010 because such credits are no longer awarded for law enforcement (exempt) AFV acquisitions.



## Exhibit 2. EPAct AFV Requirements vs. AFV Acquisitions + Credits



**Appendix A** contains AFV acquisition details, including FAST data for the numbers and types of LD vehicles that DOS leased or purchased in FY 2013. The data in Appendix A is DOS's "official" vehicular data, which is locked in FAST and cannot be changed until the next annual FAST input window.

### ***FY 2014 Planned and FY 2015 Projected Acquisitions***

DOS plans to continue its policy of acquiring AFVs exclusively for its non-exempt fleet except where operational requirements make that impractical or where it is expected to be infeasible to fuel with the AF. Detailed projections of vehicles to be acquired in future years were not required for input into FAST in December 2013 and so are not part of this report. Those projections will be input into FAST by the deadline of March 31, 2014.

### **EO 13423 – Compliance with Petroleum Use Reduction and AF Use Increase**

In FY 2013 DOS continued to pursue the petroleum reduction targets specified in EO 13423 (signed January 24, 2007), which calls for each federal agency to:

- Reduce vehicular petroleum consumption (for domestic, non-LE vehicles of any weight and operating in or out of an MSA) by two percent annually through FY 2015 (compared to the FY 2005 usage, which is referred to as the FY 2005 baseline).

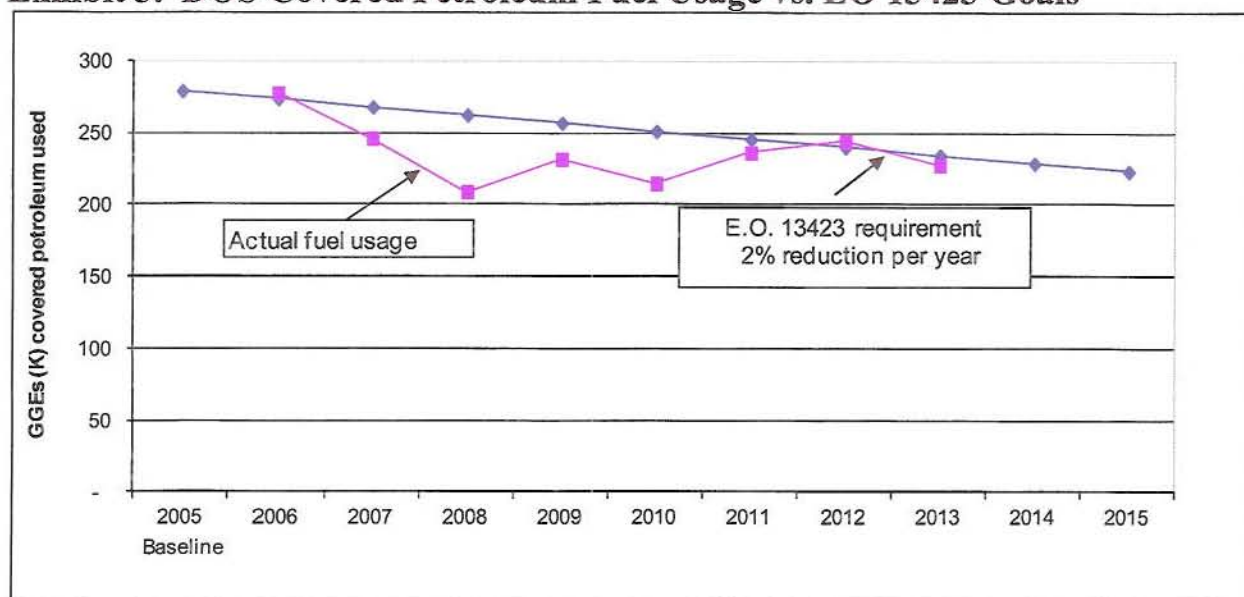
- Increase vehicular non-petroleum based fuel (i.e., alternative fuel) consumption by ten percent compounded annually.

### *Reducing Covered Petroleum Consumption*

DOS's covered petroleum fuel consumption in FY 2013 was 227,349 GGEs, an 18.5 percent reduction from the FY 2005 baseline of 279,127 GGEs. This total exceeds the target of a 16 percent reduction (two percent per year for eight years - FY 2006 to FY 2013) for 2013, resulting in DOS being compliant with the petroleum use reduction requirement in FY 2013.

DOS's FY 2013 covered petroleum fuel consumption decreased from the FY 2012 level by about 16,500 GGEs, due to an unusual increase in operations by the International Boundary and Water Commission (IBWC), resulting in higher-than-normal fuel consumption in FY2012.

**Exhibit 3. DOS Covered Petroleum Fuel Usage vs. EO 13423 Goals**



### *Increasing Annual AF Consumption*

EO 13423 requires each Federal agency to increase annual AF consumption by ten percent per year (compounded annually) through the end of FY 2015, based on the agency's FY 2005 usage baseline, which for DOS is 28,480 GGEs. Therefore, the target for FY 2013 was 61,049 GGEs. DOS is not compliant with this requirement as FY 2013 AF consumption was 19,476 GGEs, or only 32 percent of the target. This AF usage is about 6,500 GGEs lower than in FY 2012



mainly due to less utilization of compressed natural gas (CNG) with the retirement of one dedicated CNG bus and one CNG/petroleum bi-fuel vehicle previously held in inventory.

- CNG Use: DOS is now operating only five natural gas vehicles (NGVs), one CNG bi-fuel van and four dedicated CNG buses, down from seven in FY 2012; no CNG vehicles have been added to the DOS inventory due to the limited availability of NGVs from the OEMs. Moreover, the commercial CNG refueling infrastructure for these NGVs is insufficient to sustain continued operations on CNG. There had been only one source (the Pentagon Navy Exchange [NEX] station) convenient for daily DOS use but it closed on October 28, 2011. Since then the backup source, the Arlington [County] Transit (ART) site in Shirlington, Virginia, has been used. This is not as convenient a location but nevertheless was used for the CNG dedicated buses, which obtained all of their fuel from there in FY 2013.
- E85 Use: The amount of E85 (a fuel blend of 85 percent ethanol and 15 percent gasoline) that is reported in FAST for FY 2013 is 11 percent less than in FY 2012, continuing a negative trend since the closing of our primary fuel source, the Pentagon NEX station in October 2011. The flex-fuel vehicles (FFVs) are instead refueling with E85 at a Sunoco station in Georgetown, and usage has suffered when operational demands do not permit refueling at this location (that exceeds the EPCA (Section 701) required five miles or 15 minutes radius) due to heavy traffic.
- Biodiesel Use: No B20 (a fuel blend of 20 percent biodiesel and 80 percent petroleum diesel) was consumed in FY 2013 due to unavailability within the EPCA (Section 701) required five miles or 15 minutes radius. The only biodiesel source within this range, the Pentagon NEX, is now closed.

DOS took a number of steps in an effort to increase AF use in FY 2013:

- DOS contacted various entities to develop/promote AF availability:
  - Confirmed that DOS's NGVs can refuel with CNG at the Baltimore Washington International Airport since that fueling station was upgraded to accept the Wright Express (WEX) fuel credit card.
  - Determined that AFs are not available at Fort Myer's fueling point after being informed that they had CNG. Ensuing discussion led to dialogue with personnel of the Exchange, who do not believe there is sufficient volume of business at this time to justify installing AFs at their fueling stations on military installations in the Washington, D.C. area.



- In FY 2013 we learned that there is B20 and E85 available at the DC government's Department of Public Works (DPW). Confirmed with the site manager that the WEX fuel credit card is accepted there so GSA-leased vehicles, including some of DOS's diesel vehicles and AFVs, can refuel with B20 and E85 at this location. Although the DPW location is inconvenient for DOS vehicles, since it exceeds the EPO Act (Section 701) required five miles or 15 minutes radius, we will encourage its use to the fullest extent possible with the goal to report B20 usage in next year's report. DPW's CNG may also be available to the NGVs of DOS and other Federal agencies in the future.
- Worked with personnel of the Department of Energy's Federal Energy Management Program and the National Renewable Energy Laboratory to obtain and analyze fuel transaction data and AF station location data to facilitate greater AF use by DOS's dual-fuel AFVs.
- Informed DOS AFV custodians that DOS is required by EO 13423 to increase annual usage of AFs and by the EPO Act (Section 701) to use AFs in AFVs when an AFV is garaged/parked within five miles or 15 minutes of an AF station.
- Provided the Alternative Fuel Station Locator website address to AFV custodians and other DOS employees and informed them of the closest AF station locations.

### **EPO Act 2005, Section 701 - Operating Dual-fuel AFVs on AFs**

EPO Act 2005, Section 701 requires that dual-fuel AFVs (e.g., AFVs that can run equally well on gasoline or an AF) use AF exclusively unless the AF is (1) not reasonably available (neither within a 15-minute drive nor five miles from garaged location) or (2) unreasonably expensive (costs more per gallon than gasoline at the same station). LE vehicles are exempt from this requirement. Federal agencies can request a waiver (annually via FAST by June 30) for each non-exempt, dual-fuel AFV for which the distance, time, and/or cost exceed these criteria.

Since the waiver process began in 2007, the number of DOS non-exempt, dual-fuel AFVs generally has increased as shown in Exhibit 4. The number of waivers has had to increase (with a large uptick in FY 2013) to more realistically capture the number of vehicles whose operations are not within five miles of an AF refueling station. To date, AF usage in DOS AFVs has not met DOS expectations and targets.



**Exhibit 4. DOS Non-exempt, Dual-fuel AFV Fleet and Approved Waivers**

	<u># approved waivers</u>	<u># non-exempt, dual-fuel AFVs</u>
FY07	<u>67</u>	<u>147</u>
FY08	<u>61</u>	<u>169</u>
FY09	<u>58</u>	<u>190</u>
FY10	<u>70</u>	<u>214</u>
FY11	<u>87</u>	<u>247</u>
FY12	<u>71</u>	<u>276</u>
FY13	<u>114</u>	<u>265</u>

**EISA Section 141 – Low Greenhouse Gas Emitting Vehicles in FAST**

The Energy Independence and Security Act (EISA) of 2007 (Section 141) prohibits Federal agencies from acquiring LD vehicles and MD passenger vehicles that are not considered “low greenhouse gas emitting vehicles” (LGHGEVs). Beginning with the submission of the FY 2010 FAST data, Federal agencies are required to report whether each of the current year acquisitions met this criteria, and if not, what types of exceptions (“functional needs” or “alternative measures”) or circumstances applied. DOS provided guidance to its subfleets concerning the procedures for requesting the exceptions for non-LGHGEV acquisitions. The subfleets reported the FY 2013 acquisitions by exceptions category as required in FAST. Of the applicable FY 2013 acquisitions reported by the subfleets in FAST, which excludes overseas vehicles and those identified as “functional needs” exceptions, 22 vehicles were LGHGEVs. Of the 27 that were not LGHGEVs, 22 were reported as being “alternative measures” exceptions. DOS expects to increase the numbers of LGHGEV acquisitions as more become available from the OEMs and the General Services Administration (GSA).

**Executive Fleet Vehicle (EFV) Reporting**

The Presidential Memorandum on “Federal Fleet Performance” signed May 24, 2011 created a new requirement for reporting EFVs and their sizes on each agency’s website. The memorandum states: “Pursuant to motor vehicle management regulations, set forth at 41 C.F.R. 102-34.50, executive fleets are required to achieve maximum fuel efficiency; be limited in motor vehicle body size, engine size, and optional equipment to what is essential to meet agency mission; and be midsize or smaller sedans, except where larger sedans are essential

to the agency mission. Within 180 days of the date of this memorandum, any executive fleet vehicles that are larger than a midsize sedan or do not comply with alternative fueled vehicle requirements must be disclosed on agency websites.”

Therefore, in FAST, the current inventory includes an indicator for each vehicle that is part of the agency's executive fleet (those vehicles used primarily for the transport of Secretaries and Heads of Agencies, Senior Executive Service [SES] employees, and general officers). The resulting executive fleet report (by vehicle type) for DOS is included in Appendix C. Of DOS's 19 EFVs in FY 2013, only two were not compliant, which will be brought into compliance when they are replaced with smaller vehicles in FY 2015.

## **Conclusion**

DOS remains fully committed to compliance with EPO and EO requirements. With its policy of exclusively acquiring AFVs for its non-exempt fleet, except where operational requirements make such acquisitions impractical, DOS expects to continue to meet or exceed the 75 percent EPO percentage for the foreseeable future. DOS will also continue acquiring LGHEVs as OEMs provide more makes and models that meet operational requirements.

A lack of adequate commercial AF infrastructure and the closing of the Pentagon NEX station in FY 2012 continue to hinder AF refueling. However, DOS endeavors to keep its waiver requests to a minimum, to continue working with other Federal agencies and governmental entities, as well as nongovernmental organizations, to access or expand AF infrastructure, and to strengthen its efforts to increase AF consumption and decrease petroleum fuel consumption.



## Appendix A

### Department of State AFV Report – FY 2013 Actual Data

#### 1. Actual Light-Duty Vehicle Acquisitions and Exemptions

	Leased	Purchased	Total
Total Light-Duty Vehicle Acquisitions	182	277	459
Fleet Exemptions: Fleet Size	0	0	0
Fleet Exemptions: Foreign	0	273	273
Fleet Exemptions: Geographic	0	0	0
Fleet Exemptions: Non-MSA Operation	0	0	0
Vehicle Exemptions: LE Vehicle	138	4	142
Vehicle Exemptions: Non-covered Vehicle	0	0	0
Vehicle Exemptions: Non-MSA Operation	1	0	1
Total EPAAct-Covered Vehicles	43	0	43

#### 2. Actual Alternative Fuel Vehicle Acquisition Detail

Vehicle Type	Fuel	LE	Acquisitions		Total	EPAct Credits
			Lease	Purchase		
Light Duty Vehicles						
Sedan/St Wgn Compact	E85 FF	No	1	0	1	1
Sedan/St Wgn Compact	E85 FF	Yes	3	0	3	0
Sedan/St Wgn Compact	GAS HY <sup>3</sup>	No	7	0	7	7
Sedan/St Wgn Large	E85 FF	Yes	1	0	1	0
Sedan/St Wgn Midsize	E85 FF	No	5	0	5	5
Sedan/St Wgn Midsize	E85 FF	Yes	39	0	39	0
Sedan/St Wgn Subcompact	E85 FF	Yes	1	0	1	0
LD Minivan 4x2 (Passenger)	E85 FF	No	13	0	13	13
LD Minivan 4x2 (Passenger)	E85 FF	Yes	11	0	11	0
LD SUV 4x2	E85 FF	Yes	2	0	2	0
LD Pickup 4x4	E85 FF	No	5	0	5	5
LD Pickup 4x4	E85 FF	Yes	1	0	1	0
LD SUV 4x4	E85 FF	No	5	0	5	5
LD SUV 4x4	E85 FF	Yes	37	0	37	0
LD SUV 4x4	GAS HY <sup>3</sup>	Yes	1	0	1	0
Medium Duty Vehicles						
MD Other	E85 FF	No	1	0	1	1
MD Pickup	E85 FF	No	2	0	2	2
MD Van (Cargo)	E85 FF	No	3	0	3	3
MD Van (Cargo)	E85 FF	Yes	1	0	1	0
Totals:			139	0	139	42

#### 3. Actual EPAAct Acquisition Credits Summary

Base AFV Acquisition Credits:	42
Zero Emission Vehicle (ZEV) Credits:	0
Dedicated Light Duty AFV Credits:	0
Dedicated Medium Duty AFV Credits:	0
Dedicated Heavy Duty AFV Credits:	0
Biodiesel Fuel Usage Credits: <sup>4</sup>	0
Total EPAAct Credits:	42
Overall EPAAct Compliance Percentage:	98 %

## Appendix B

### Department of State FY 2013 EO 13423 Fuel Consumption Report

#### Covered Petroleum Consumption in GGE

	Baseline										
	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Gasoline		237,260	210,103	166,829	159,409	152,197	173,974	183,545	159,339		
Diesel		39,760	36,006	41,510	69,845	52,750	60,331	60,292	68,010		
B20		415	35	350	2,033	9,774	1,648	0	0		
Total	279,127	277,435	246,144	208,689	231,287	214,721	235,953	243,837	227,349		
Target		273,544	267,961	262,379	256,796	251,214	245,631	240,049	234,466	228,884	223,301
Compliant		No	Yes	Yes	Yes	Yes	Yes	No	Yes		

\* B20 is the diesel component from covered biodiesel consumption.

#### Alternative Fuel Consumption in GGE

	Baseline										
	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
CNG		18,267	8,997	9,859	10,557	9,892	7,086	11,939	6,931		
LNG		0	0	0	0	0	0	0	0		
LPG		0	0	0	0	0	0	0	0		
E-85		4,525	3,454	3,248	3,048	16,735	16,512	14,117	12,545		
Electric		0	0	0	0	0	0	0	0		
M-85		0	0	0	0	0	0	0	0		
B100		104	9	88	508	2,443	412	0	0		
Hydrogen		0	0	0	0	0	0	0	0		
Total	28,480	22,896	12,460	13,195	14,113	29,070	24,010	26,056	19,476		
Target		31,328	34,460	37,906	41,697	45,867	50,454	55,499	61,049	67,154	73,869
Compli- ant		No	No	No	No	No	No	No	No		

\*B100 is calculated at 20% of the reported B20 and 100% of the reported B100 fuel used in the Section 3 Actual Fuel Cost/Consumption by Fuel Type data input screen.



**Appendix C**

**Executive Fleet Summary Report**

**Department of State - FY 2013**

Fleet Name	Locale	Vehicle Type	Fuel Config	Owner-ship	Armor	#	Compliant
Fleet Management Office	Domestic	Sedan/St Wgn Midsize	E85 FF	Comm	None	14	Yes
International Boundary & Water Commission	Domestic	Sedan/St Wgn Midsize	E85 FF	GSA	None	1	Yes
Fleet Management Office	Domestic	LD SUV 4x4	E85 FF	Comm	None	2	Yes
<b>Compliant Subtotal</b>						<b>17</b>	
Diplomatic Security	Domestic	Sedan/St Wgn Large	E85 FF	GSA	None	2	No
<b>Non-Compliant Subtotal</b>						<b>2</b>	
<b>Total</b>						<b>19</b>	

**Appendix D**  
**Department of State**  
**Glossary**

AF - Alternative Fuel; a fuel defined as alternative by the EPAct of 1992.

AFV - Alternative Fuel Vehicle; a vehicle that can run on an alternative fuel.

ART – Arlington Transit; the mass transit program of Arlington County, VA.

B20 – fuel blend of 20 percent biodiesel and 80 percent petrodiesel.

Biodiesel – a renewable alternative fuel made primarily from soybeans in the US.

CNG – Compressed Natural Gas; a domestically produced alternative fuel.

CNG Bi-Fuel Vehicle – a vehicle with two separate fueling systems that enable it to use either CNG or a conventional fuel (gasoline or diesel).

CNG Dedicated Vehicle – a vehicle that uses only CNG fuel.

Diesel – Petroleum diesel

Dual Fuel Vehicle – designed to operate on a combination of an alternative fuel and a conventional fuel (includes CNG bi-fuel and E85 flex-fuel vehicles).

DOS – Department of State

DE – Dedicated; a vehicle that uses only one type of fuel, such as a CNG DE bus.

DS – Bureau of Diplomatic Security

E85 – fuel blend of 85 percent ethanol and 15 percent gasoline.

ECRA – Energy Conservation Reauthorization Act

EFVs – Executive fleet vehicles are vehicles used primarily to transport Senior Executives (Heads of Agencies, Senior Executive Service [SES] employees and General Officers).

EO – Executive Oder

EO 13423 – Strengthening Federal Environmental, Energy, and Transportation Management

Ethanol – an alcohol-based alternative fuel made primarily from corn in the US.

FAST – Federal Automotive Statistical Tool; an online data reporting system for Federal fleet management personnel.

FFV – Flexible Fuel Vehicle; a vehicle that can run equally well on any blend of gasoline and ethanol up to 85% ethanol (E85).



FMO – Fleet Management & Operations Division, Office of General Services Management, Deputy Assistant Secretary for Operations, Bureau of Administration, DOS

FY – Fiscal Year

GGE – Gasoline Gallon Equivalent: a concept used to describe the difference in energy content of various fuels, using gasoline as the baseline.

GSA – General Services Admistration

GVWR – Gross Vehicle Weight Rating

HD – Heavy Duty, a vehicle weighing > 16,000 lbs GVWR.

IBWC – International Boundary and Water Commission

LD – Light Duty; a vehicle that weighs less than 8,500 lbs. GVWR.

LE – Law Enforcement

LGHGEV – Low greenhouse gas emitting vehicle

MD – Medium Duty, a vehicle weighing between 8,500 lbs. and 16,000 lbs. GVWR

MSA – Metropolitan Statistical Area

NEX – Navy Exchange

NGV – Natural gas vehicle

OEM – Original equipment manufacturer

Petro diesel – Diesel from petroleum

SUV – Sport Utility Vehicle